Analysis of the Reasons for the High Turnover of Clinicians in Neighborhood Health Centers

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NEIGHBORHOOD HEALTH CENTERS (NHCs) were established throughout the United States under the 1965 Comprehensive Health Services program of the Office of Economic Opportunity. Subsequently, funding for the centers has changed, but their structure and purpose—to deliver comprehensive health services to people in low-income, low-access areas—has not. Critical to the success of these centers is not only the recruitment, but also the retention, of clinical staff. Yet, since fewer than 20 percent of the physicians recruited have remained in the centers for 4 years or more, the turnover is considerably higher than in other forms of salaried practice (*1*). This instability in physician staffing adversely affects the organization itself, as well as the continuity of patient care.

Therefore, in 1977 we undertook a study to determine why clinicians (that is, physicians, nurse practitioners, and physician assistants) were leaving the centers and to identify potential strategies that might decrease attrition. The turnover of nurse practitioners and physician assistants, who deliver a substantial amount of the care provided in the NHCs, had not been previously analyzed.

Methods

All neighborhood health centers in HEW (Department of Health, Education, and Welfare—now the Department of Health and Human Services) Region X (Alaska, Idaho, Washington, and Oregon) were targeted for study. The Region X office provided us with a list of all institutions that fulfilled our operational definition of an NHC. Not included in the study were two additional centers that had been funded but were unable to employ any clinicians during the study period (1971–76).

We formulated this definition of a neighborhood health center for the study: a health facility that provides a full range of medical services to all family members, that is governed by a consumer board, and that receives at least half of its funding from HEW programs, namely, Community Health Clinics, Family Health Centers, Migrant Health Centers, Health Underserved Rural Areas, and the Rural Health Initiative. This definition excludes facilities solely serving children (Children and Youth Projects) as well as those solely providing family planning services. The 10 health centers that fit this definition are listed in the table along with the size of their respective communities, the number of patient encounters, and the sources and level of their financial support during 1976–77.

Eight of the 10 centers provided a list of all past and currently employed clinicians (physicians, nurse practitioners, physician assistants, and MEDEX). Two centers insisted on keeping employees' names and other background information confidential, so that it was not possible to analyze data on nonresponders from these clinics. Of the 119 clinicians who had been employed in the 10 centers since their inception, 50 physicians and 31 nurse practitioners and physician assistants had left before January 1977. Sixteen physicians and 22 nurse practitioners and physician assistants were employed in the centers at the time of our survey. When available, the employing center provided current addresses of both present and past personnel; this information was supplemented by current computerized information from the American Medical Association and State boards of nursing.

A questionnaire with 86 scaled items and 4 open-ended questions was prepared and pretested. Questions dealt with the clinician's background, education, and training; the clinic; patient-clinician interaction; the community; the medical community; the clinician's family; and the clinician's future plans. All the clini-

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cians were asked to indicate their reasons for choosing to work at the particular clinic and to state their accomplishments. Those who had left the NHCs were asked why they had left and what might have influenced them to stay longer. The clinicians currently employed were asked if they were planning to leave. Affirmative responses were followed by open-ended questions seeking to elicit their reasons for planning to leave and also factors that might have influenced them to stay. Categories for classifying the responses to the open-ended questions were determined independently by four social scientists.

Results

Of the 119 clinicians who had been employed by the 10 neighborhood health centers, current addresses could not be determined for 18. Three mailings in early 1977 resulted in the following responses to the 101 questionnaires that were sent out:

Category	*Number ever employed*	*Number responding*
Departed physicians	50	31
Departed nurse practitioners and physician assistants	31	12
Physicians remaining	16	9
Nurse practitioners and physician assistants remaining	22	15
Total	119	67

Neighborhood health centers in HEW Region X, fiscal year 1976–77

Center and location	*Beginning year*	*Community population*	*Patient encounters*	*Funding sources*	*Grants from named sources*
Farm Workers Family Health Center, Toppenish, Wash.	1970	5,744	32,338	Migrant Health Centers	$961,887
Community Health Clinic, Inc,. Nampa, Idaho	1971	20,768	28,525	Migrant Health Centers, Health Underserved Rural Areas, and National Health Service Corps	638,454
Cascade Health Care, Inc., Portland, Oreg.	1972	382,619	38,879	Family Health Centers	2,262,880
Idaho Migrant Council, Inc., Migrant Health Clinic, Caldwell, Idaho	1972	14,219	9,400	Migrant Health Centers	259,537
North Central Washington Migrant Health Project, Wenathee, Wash.	1972	16,912	20,000	Migrant Health Centers	277,632
Whatcom Skagit Rural Opportunity Council, Mt. Vernon, Wash.	1972	8,804	12,030	Migrant Health Centers	328,071
Columbia Basin Health Association, Othello, Wash.	1973	4,112	15,750	Community Health Centers	564,000
Oregon Rural Opportunities Health Care Services, Woodburn, Oreg.	1973	7,495	15,364	Migrant Health Centers	614,209
Seattle Indian Health Board, Seattle, Wash.	1974	530,831	24,000	Community Health Centers and National Health Service Corps	1,107,964
Upper Rogue Community Health Center, Shady Cove, Oreg.	1975	2,380	4,243	Rural Health Initiative	206,682

Data from the American Medical Association allowed us to compare nonresponding physicians with responding physicians for several characteristics. The mean number of years since licensure for nonresponding physicians at the time of the study was 7.9 years, compared with 7.8 years for responding physicians. Fifty-eight percent of the responding physicians, compared with 64 percent of the nonresponding, were living in the community in which the NHC where they were working or had worked was located. Although no other comparisons were possible, the similarities between the respondents and nonrespondents were evident.

On the vast majority of responses to the questionnaires, chi-square analysis revealed no differences between physicians versus nurse practitioners and physician assistants; nor between physicians employed in the past versus present physicians. The items on which there was agreement were as follows:

- Equipment
- Clinic staff conflicts
- Presence of health care team
- Team's functioning
- Support personnel
- Outreach workers
- Presence of nurse practitioners
- Number of nurse practitioners
- Judgment of nurse practitioners' ability
- Time spent training nurse practitioners
- Number of physicians
- Time for education weekly and annually
- Satisfaction with time for education
- Hours worked
- Satisfaction with salary
- Time available to spend with each patient
- Problems encountered because of language or cultural differences
- Relationship with other physicians
- Access to subspecialty consultation
- Membership in State or county medical society
- Time available for personal growth
- Friendships
- Recreational and cultural facilities
- Spouse's ability to find satisfactory work
- Written contract
- Multiple clinic sites
- Fulfillment of military obligation
- Marital status
- Spouse's satisfaction with the community

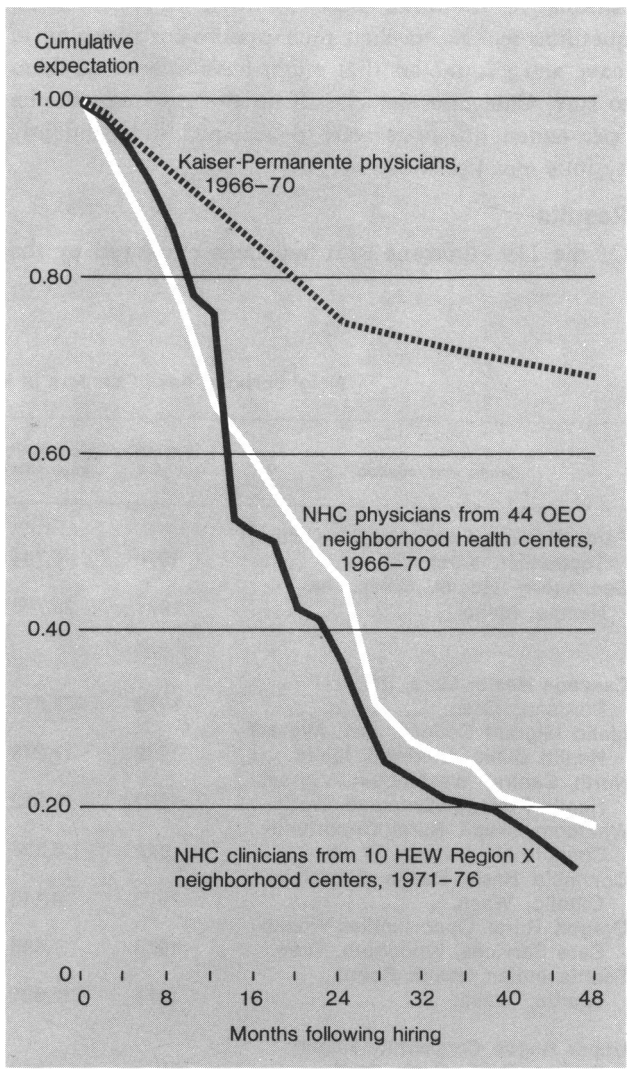
There were, however, some significant differences between physicians and nonphysicians. Physicians had higher salaries, more hospital privileges, and more input into medical policy. Nurse practitioners and physician assistants were more satisfied than physicians with the mixture of medical problems, and they perceived greater financial stability in their centers than did the physicians. Because of the overall similarity, however, of the responses of physicians, nurse practitioners, and physician assistants, their responses were combined for the comparison of past and present clinicians.

Of all the clinicians responding, 37 percent grew up in rural areas or small towns. The physicians in our survey were younger than neighborhood health center physicians in other demographic studies (*1,2*). Thirty-eight percent were under 30, 45 percent between 31 and 40, and only 17 percent over 41. Thirty-seven percnt were in their first clinical job, and an additional 24 percent had less than 5 years of experience.

The chart shows the cumulative expectation for three groups of medical professionals of remaining in employment. The information is plotted as a survivorship curve. The survivorship in one group, our sample, was virtually identical to that of a group of 1,200 Office of Economic Opportunity physicians employed from 1966 to 1970 (*1,2*). The differences between these two groups and salaried physicians from a large HMO (health maintenance organization)—Kaiser-Permanente—are clear (*1,2*). All but four of the departing clinicians whom we surveyed had left earlier than they had initially expected to.

We considered each demographic characteristic separately to determine its influence on length of stay.

Cumulative expectation of remaining in employment in a neighborhood health center. 1966-70, and 1971-76, and in a health maintenance organization (Kaiser-Permanente), 1966-70



SOURCES: References 1 and 2.

A negative linear correlation ($r = -0.29$, $P < 0.05$) existed between size of community of origin and length of stay. Persons from smaller communities tended to stay longer. No relationship was found between age ($P = 0.80$), years of experience ($P = 0.53$), or marital status ($P = 0.86$ and the length of stay. Forcing the inclusion of all demographic variables into a multiple linear regression model did not explain a significant amount of variance ($r^2 = 0.09$, $P = 0.29$). Salary was not an important variable either. Sixty-two percent of the physicians earned less than $25,000, and 78 percent of the nurse practitioners and physician assistants earned less than $16,000; yet, only 22 percent of the respondents indicated that they believed that their salary was inadequate.

The clinicians' high turnover rate did not seem to be related to unhappiness with the community. The clinicians were generally satisfied with all aspects of it, including outdoor recreation, cultural activities, schools, and so forth, and few reported that their spouses were unhappy with the community. Moreover, of the 40 who had left an NHC, 22 remained in the same community. Of those who had moved out of the area, 5 took further training, 2 retired, and 10 entered clinical practice.

Joining a clinic in its first year of operation was a strong predictor of a longer term of service. For those clinicians who were present in the formative year of a clinic, the mean length of stay was 22.8 months and the median length 23 months, compared with a mean of 11.2 months and a median of 10 months for those joining later ($T = 2.99$ $P < 0.005$).

The clinicians were satisfied with their patient loads, call schedules, office facilities, and office personnel. Only 19 percent considered the number of support personnel to be inadequate, although 52 percent considered the number of outreach workers inadequate, and 52 percent considered the number of physicians to be inadequate. The clinicians' satisfaction with the hospital and medical community was high. On the negative side, nearly two-thirds reported that they had less than 1 hour weekly for education, and 78 percent of these respondents considered this time to be inadequate.

Clinicians formerly employed at the centers were significantly more dissatisfied than present clinicians in respect to the following 10 items, as the P values show:

Item	P *value* <
Organizational stability	0.01
Financial stability	0.02
Input into medical policy	0.01
Input into administrative policy	0.01
Administrative support	0.01
Control over ability to practice medicine	0.01
Community board disruptive to delivery of care	0.05
HEW disruptive to delivery of care	0.01
Actual tasks significantly different than expected	0.05
Mixture of medical problems too routine	0.01

A striking area of dissatisfaction among former clinicians was organizational issues. Two-thirds of them, compared with 23 percent of those currently employed, considered administrative support to be inadequate. These former clinicians perceived their clinic as highly unstable ($\chi^2 = 17.2$, 3 df, $P < 0.001$). Seventy-two percent of the former clinicians, compared with 17 percent of those currently employed, perceived the duration of organizational stability to be only on a month to month basis. Only 14 percent of the former clinicians, as opposed to 45 percent of those currently employed, perceived the clinic's organization as remaining stable for more than 6 months.

Financial stability (largely dependent on the flow of funds from the Department of Health, Education, and Welfare) was also viewed as more unstable by former clinicians than by current ones. Fully 53 percent of the former clinicians considered HEW to be disruptive to the delivery of medical care. Only 10 percent of these clinicians considered the HEW role to be facilitative. This opinion contrasts with that of current clinicians, of whom only 9 percent considered the Department's role to be disruptive.

Former clinicians also viewed community boards' influence on medical care negatively; 47 percent described the boards as disruptive, whereas only 17 percent of the current clinicians considered this to be true. In no instance, however, did a clinician indicate that a community board facilitated the delivery of medical care.

The greater satisfaction of the currently employed clinicians is not surprising; they have chosen to remain. Their greater satisfaction cannot be attributed to having been employed for a shorter period, since current clinicians had been employed for a median of 19.5 months and a mean of 26 months at the time of the study, compared with a median of 15.5 months and a mean of 18.8 months for the clinicians who had left the NHCs. Other possible reasons for the increased satisfaction of current clinicians might be that they have different personalities than those who left (a hypothesis that we did not attempt to assess) or that the nature of the NHC organization might have changed.

We did find evidence of organizational change when we analyzed the clinicians' perceptions of organizational stability according to the age of the NHC. There was a strong correlation between the clinicians' perception of a center's stability and its age ($r = 0.63$, $P < 0.05$). This change in perception may be related to the calmer political climate of the past few years, which is in contrast to the turbulence of the late 1960s when the war in Vietnam and the war on poverty were still raging. However, the survivorship of the physicians employed

in NHCs between 1966 and 1970 was found to be identical to that of those employed between 1971 and 1976. The similarities between survivorship in the 1966–70 OEO survey and in our 1971–76 survey thus reflect the common experiences of clinicians in evolving young organizations.

Replies to the open-end questions added significant qualitative information about the personal frustrations, disappointments, and tragedies that the respondents experienced. Expressions of dissatisfaction varied from a mundane comment that "sick leaves not taken are not payable and not cumulative" to a macabre charge of "alienation from the community as an outsider to the point of killing my dogs and threatening me personally."

Reasons given for leaving, as ranked in importance by the respondents, were as follows:

	Number of respondents assigning—		
Reasons for leaving	*Rank 1*	*Rank 2*	*Rank 3 or lower*
Incompetent administration	10	2	2
Malevolent administration	7	1	4
Vague HEW policy	6	3	2
Organizational instability	4	2	2
Incompetent community board	3	2	5
Career change	4	2	1
Conflict between administrative and medical staff	2	4	1
Malevolent board	2	2	1
Long hours	2	2	1
Spouse's dissatisfaction	2	0	1

The category "Malevolent administration" included accusations of intentional monetary fraud, malfeasance, and arbitrary decision making that either ignored Federal guidelines or the established clinic policy. This category did not include complaints related to administrative inexperience or incompetence. "Vague HEW policy" included changing HEW requirements, conflicting policies imposed by different government agencies, and the failure of HEW to become involved in major community or community board conflicts that threatened services. In several instances, the respondents stated that HEW's only arbitration technique was the sanction of defunding. "Organizational instability" was mentioned frequently. Since from this response it was impossible to determine the specific etiology of the instability, the response was listed in a separate category. Incompetent community boards were mentioned, but usually these boards were perceived only as ill prepared rather than intentionally obstructive.

The following table, based on responses to the question, What would have induced you to stay longer? confirms the significance of administrative issues.

	Number of respondents assigning—		
Inducements to stay	*Rank 1*	*Rank 2*	*Rank 3 or lower*
Improved administration	15	4	2
Improved HEW guidelines	8	2	0
Nothing	7	0	0
Improved community board	3	0	3
More personnel	2	0	3
More community support	2	1	1
Increased spouse satisfaction	2	0	0
More administrative input	1	2	1
Greater stability	1	3	0
Miscellaneous administrative changes	1	1	1
More educational opportunities	0	1	3

Neighborhood health center clinicians often have been stereotyped as idealists who burn out because they have unrealistic goals. They also have been characterized as innovators who are more inclined to start projects than to maintain them. To test this notion, the respondents were asked to rank the factors that they currently considered most significant in their careers. No differences in this respect existed between those formerly and presently employed in NHCs. Both groups regarded geographic location as the most important factor in selecting a practice site. In second place was the opportunity for a stimulating clinical practice. A distant third place was assigned to opportunities for creating new methods of health care delivery. Working in an underserved area was ranked fourth. When we asked the clinicians to recall why they initially began to work in a neighborhood health center, pragmatic reasons (including geography and salary) were ranked first; opportunities for a stimulating practice, second; working in a poverty area, third; and opportunities for innovation, fourth.

Comment

Our study confirmed previous work documenting the high turnover of medical staff in neighborhood health centers (*1,2*). The turnover in our sample was virtually identical to that in Tilson's study of all NHCs in the period 1966–70. During the period 1971–76, the neighborhood health centers that we studied still seemed to be experiencing this rapid attrition. Military clinics and clinics of the National Health Service Corps have been able to deliver medical services by using physicians who often leave after a 2-year enlistment. However, only 26 percent of the departed clinicians in our study remained this long; only 10 percent remained as long as they had originally planned. Of the currently employed group, only slightly more than a third had reached the

2-year milestone. This short term of service costs in terms of recruitment efforts, loss of efficiency, and occasional gaps in clinical services when an NHC is left without a clinician for a period of time.

Several studies have addressed the question of how physicians can be attracted to practice in underserved areas (*3,4*). Equally important is the identification of the factors associated with clinicians staying in such areas. In contrast to a study revealing that dissatisfaction with the community was a major reason for primary care physicians to leave practice (*5*), our results indicated that clinicians who worked in NHCs were apparently satisfied with their communities. Satisfaction with the community is also echoed in a recent survey of pediatricians, of whom fully 30 percent were seriously contemplating a career change (*6*). The primary reasons for the pediatricians' dissatisfaction were insufficient challenge, too little free time, and a feeling of being "burned out." The majority of clinicians in our survey remained in the same community when they left the NHC; they sought only a different practice setting. This observation is useful because if clinicians were dissatisfied with their communities, the potential for change that might reduce their attrition would be small. Except for a tendency to have come from larger communities, clinicians who left the NHCs did not seem to differ from those who stayed, either in background or years of experience. The primary explanation for the high attrition rate among the clinicians was found in organizational issues.

Some of the problems seemed to be those that commonly arise during the startup period of any facility. Although the clinicians in the study had a strong perception of organizational instability, those who were present during a clinic's initial establishment remained significantly longer than those who started from 6 months to 2 years after a clinic opened. The same personality characteristics that induce clinicians to show up for a clinic's birth may provide them with the tenacity to remain despite their perception of a large number of problems. Those who believe in human bonding would certainly not be surprised to learn of the importance of the attachment that forms during a clinic's birth. Clearly, people differ in their ability to adapt to and cope with problem organizations. Nevertheless, we need to recognize the source of problems and seek their solution.

These clinicians not only were working for very young clinics; they were also participating in a form of medical care that was in the early experimental stages. Neighborhood health centers are still a relatively new model for delivering health care compared with such historically mature institutions as hospitals, health departments, private practices, and even HMOs.

As stated in the OEO legislation under which the neighborhood health centers were established, their goals are to assure that services "are made readily accessible to low income residents" and that the services "are furnished in a manner most responsive to their needs and with their participation and wherever possible or combined with, or included within, arrangements for providing employment, education, social, or other assistance needed by the families and individuals served . . ." (*7*).

Although certainly admirable, these goals are broad enough to challenge even the most established facility. The wide variation both in their interpretation and implementation, as well as in the competence of administrations and community boards, has been well documented (*8–15*). Many NHCs have had token community boards that were ineffectual; others have had boards that were involved in a broad range of community activities (*12–14*). Whether a board is effective depends on whether its members and the administrative staff are strong. However, strong staff personalities have frequently limited consumer participation (*15*). One reason for the improved perception on the part of the respondents in our study of the NHC's relations with community board members may have been newer policies that no longer require an annual election of all board members. A year certainly seems too short a time for a person to learn how to function effectively in a policymaking role in health care delivery.

The clinicians in our survey were distressed by conflicts with the NHC administration, the community, and the Department of Health, Education, and Welfare over the purpose of the clinics. Although many were young and perhaps lacked experience in dealing with an organization's management, the clinicians currently employed in NHCs perceived the centers as having greater organizational stability than did the clinicians who had left them. This change may have been due to maturation of the centers or to improved relationships with HEW.

The current clinicians' characterization of community boards as less disruptive, the greater input of these clinicians into clinic policy, and the greater satisfaction that current clinicians expressed about a number of other items, as compared with the former clinicians, may reflect a trend toward greater stability in both young and mature neighborhood health centers.

Cultural differences between clinicians working in NHCs and the patients they serve have also been mentioned as a significant factor in physician attrition (*9–11*). Our respondents did not cite cultural disso-

nance in their answers to scaled or open-ended questions, but the instrument may not have been sensitive enough to detect this factor.

Answers to the question, What would have induced you to stay longer? provide specific as well as general recommendations. These recommendations include: (*a*) the formation of medical-administrative groups to work on overlapping problems, (*b*) the appointment of a clinical medical director to work with the administrative staff, the clinic board, and the Department of Health, Education, and Welfare, and (*c*) explicit job descriptions or contracts specifying tasks, the quality and quantity of services to be delivered, salary advances, and educational leaves.

In addition, we believe that project directors and local boards need to understand HEW policy, and prospective employees should know the explicit goals of the individual clinic. Finally, when major conflicts arise at the community level, the funding agency should facilitate negotiation and ensure that medical services continue to be delivered.

Careful mechanisms must be devised that will afford a fragile young organization the opportunity to reach maturity. The goal of a parent organization must be to prevent the weakness of infancy, the dangerous exploration of the toddler, and the headstrong run toward independence of the adolescent from proving fatal. The formulation of clear contracts, budgets, and priorities will go a long way in helping young clinics get through their growing pains with less turmoil.

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SYNOPSIS

PANTELL, ROBERT H. Medical University of South Carolina), REILLY, TERRY, and LIANG, MATTHEW, H.: *Analysis of the reasons for the turnover of clinicians in neighborhood health centers. Public Health Reports, Vol. 95, July–August 1980, pp. 344–350.*

A high rate of turnover of professional personnel in a clinic is disruptive to patient care and organizational stability as well as to the individual clinician. The turnover rate for clinicians (physicians, nurse practitioners, and physician assistants) working in neighborhood health centers (NHCs) is considerably higher than that for clinicians in other forms of practics.

All 10 of the neighborhood health centers in HEW (Department of Health, Education, and Welfare—now the Department of Health and Human Services) Region X (Alaska, Idaho, Washington, and Oregon) that offered a full range of medical services provided information about the clinicians that they had employed since their inception. One hundred and one clinicians were surveyed about their work experience. The vast majority of those clinicians who had left a neighborhood health center remained in the community; they cited organizational issues as being at the heart of their dissatisfaction with the centers. Clinicians who began work during the initiation of a clinic remained significantly longer. The results suggest the immediate need for a strategy directed at the smooth organizational evolution of each NHC right from its inception.